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14 November 2003

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Australian Patent Office  
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AUSTRALIA

Total: seven pages

Dear Ms Tharu Fernando

**RE: Response to Written Opinion for  
PCT Patent Application No. PCT/SG03/00015  
Applicant : ER, Poh Leong  
Title: A Paint Roller for Selectively Applying Paint  
at Surface Corners  
Our Ref : 1008.P003PCT/CKM**

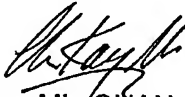
We refer to the above PCT patent application and the Written Opinion dated 16 October 2003.

In response to the Written Opinion, please find enclosed two pages of remarks and a set of amended claims.

We respectfully submit that no new matter has been added to the application by these amended claims.

We look forward to receiving the Examiner's allowance of the amended claims for of the above PCT application in view of our remarks. Nevertheless, we request the Examiner for additional opportunities to submit amendments or arguments should the amendments not result in allowance.

Yours sincerely  
**LAWRENCE Y.D. HO & ASSOCIATES PTE LTD**

  
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**Response to Written Opinion for PCT Patent Application No.  
PCT/SG03/00015**

We would respectfully like to first differentiate the cited prior art from the present invention before addressing the examiner's comments.

Where we agree with certain points the examiner has raised, we have narrowed certain claims accordingly.

**C1 – NL 8301130 (Schuler JP)**

We concur with the examiner in that it is difficult, if not impossible, to tell from both FIG. 1 and FIG. 2 if the applicator is capable of being rotatable at the coupling portion. However, we would like to point out that it appears from FIG. 2 of C1 that the applicator appears to be hollow but with several structures, unlike the simple chamber to contain paint as used in the present invention.

**C2 – CA 2101124 (Bazydlo S)**

This patent teaches a cone-shaped paint roller for painting corner and ceiling seams. The use of similarly frusto-conically shaped paint applicators is well-understood and this invention does not have a reservoir for the storage of paint and thus requires frequent re-wetting of the applicator with paint.

The unique combination of features of the present invention of a paint storage chamber of a frusto-conical shape with the coupling end having a planar cross-sectional area smaller than that of the opposite end, and comprising an abutment member is thus inventive over C2. We respectfully contend that C2 neither teaches nor anticipates the present invention where paint is stored within the applicator.

**C3 – US 5,412,832 (Irvén)**

The invention as taught by C3 requires a complicated mechanism. It has two internal portions rotating on two angled axles (column 3, lines 40-68; column 4, lines 4-8; FIG. 1) to achieve the same effects as the simple elements of the present invention; ie no anticipation. In addition, an elastic tubular covering required (column 2, line 31). C3 also does not have a reservoir to contain paint.

It can also be seen from the FIG. 2 of C3 that the applicator as a whole, is not frusto-conical in shape but is cylindrical. Only the smaller diameter end 44 of the roller body 42 is of frusto-conical. As such, it cannot be compared to the present invention.

Only when the offset link is enable will the smaller diameter end of the roller (marked with a 'X' in FIG. 1) be distorted and even so, the shape of the applicator as a whole is not frusto-conical.

The objective of the invention of C3 is to allow paint to be applied to "inner corners, edges, and along or adjacent straight lines while still being appropriate for large area surface painting" (Abstract).

As such, we respectfully contend that C3 does not anticipate the present invention.

C4 - GB 2143158A (Multigood BV)

This joint between paint applicator and handle of this invention merely allows the user to readily position the invention in a variety of orientations relative to user or housing of the invention (lines 44-49).

Other objects of the invention are to provide an efficient transfer of paint without leaking, a reservoir for containing paint, and a clutch mechanism of adjusting the angle of the applicator in relation to the handle (lines 39-83).

The problem of painting corners of surfaces is not addressed and we do not believe that this invention anticipates the present invention.

It is very clear from FIGS. 6 and 7 that the paint reservoir of C4 is not contained within the body of the roller and a means 82 of transferring paint from the reservoir 54 to the roller 40 is required.

We cannot see how C4 relates to the present invention and as such, we respectfully contend that C2 should not be read in combination with C4.

The present invention is a frusto-conically shaped paint applicator with a reservoir for paint that allows painting of corners and edges. It achieves that without complicated internal mechanisms unlike C3, it has its own reservoir, unlike C1 or C2 and its reservoir is internal to the applicator roller, unlike C4. Thus, the present invention is novel and inventive over the cited prior art.

However, we concur with the examiner that Claim 1 may be too broad with respect to the prior art and we have amended the claim set to restricted the scope.

This has been done by incorporating original dependent Claim 5 into independent Claim 1 so as not to infringe upon the prior art. The remaining claims have been renumbered accordingly and no new matter has been added by this amendment.

We hope that with the amended claim set, that the examiner will find the scope of the present invention not overly broad and will render a favourable opinion.

What is claimed is:

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1. A paint roller comprising:  
a frustoconically-shaped applicator having two opposite ends, a coupling portion disposed at one of said opposite ends, and an external surface between said two opposite ends, said frustoconically-shaped applicator being rotatable at said coupling portion about a rotary axis;  
said frustoconically-shaped applicator comprises a chamber for storing paint;  
and  
at least one paint-absorbable member mounted to said external surface.
2. The paint roller as claimed in Claim 1, and further comprising a movement coupler detachably coupled to said coupling portion.
3. The paint roller as claimed in Claim 2, wherein said movement coupler comprises a rotary connecting portion adapted to coact with said coupling portion for rotary movement about said rotary axis.
4. The paint roller as claimed in Claim 2, wherein said movement coupler comprises a pivotal connecting portion adapted to coact with a pivot mount of a handle for pivotal movement of said frustoconically-shaped applicator.
5. The paint roller as claimed in Claim 1, wherein said frustoconically-shaped applicator further comprises at least one closable inlet leading into said chamber.
6. The paint roller as claimed in Claim 5, wherein said at least one closable inlet is disposed at one of said opposite ends.
7. The paint roller as claimed in Claim 1, wherein said chamber comprises at least one paint-permeable portion coupled to said at least one paint-absorbable member.

8. The paint roller as claimed in Claim 1, wherein one of said opposite ends is a coupling end, said coupling portion being formed at said coupling end.
9. The paint roller as claimed in Claim 8, wherein said coupling end has a planar cross-section smaller than a corresponding planar cross-section of the other opposite end.
10. The paint roller as claimed in Claim 9, wherein said coupling portion is disposed centrally relative to said planar cross-section of said coupling end.
11. The paint roller as claimed in Claim 1, and further comprising at least one abutment member mountable to one of said opposite ends.

12. A paint roller comprising:
  - a frustoconically-shaped applicator having two opposite ends, a coupling portion disposed at one of said opposite ends, and an external surface between said two opposite ends, said frustoconically-shaped applicator being rotatable at said coupling portion about a rotary axis;
  - at least one paint-absorbable member mounted to said external surface;
  - a handle having a pivot mount;
  - and
  - a movement coupler detachably coupled to said coupling portion and to said pivot mount.
13. The paint roller as claimed in Claim 12, wherein said movement coupler comprises a rotary connecting portion adapted to coact with said coupling portion for rotary movement of said frustoconically-shaped applicator about said rotary axis.
14. The paint roller as claimed in Claim 12, wherein said movement coupler comprises a pivotal connecting portion adapted to coact with said pivot mount for pivotal movement of said frustoconically-shaped applicator.
15. The paint roller as claimed in Claim 12, wherein said frustoconically-shaped applicator comprises a chamber for storing paint.
16. The paint roller as claimed in Claim 15, wherein said frustoconically-shaped applicator further comprises at least one closable inlet leading into said chamber.
17. The paint roller as claimed in Claim 16, wherein said at least one closable inlet is disposed at one of said opposite ends.

18. The paint roller as claimed in Claim 15, wherein said chamber comprises at least one paint-permeable portion coupled to said at least one paint-absorbable member.
19. The paint roller as claimed in Claim 12, wherein one of said opposite ends is a coupling end, said coupling portion being formed at said coupling end.
20. The paint roller as claimed in Claim 19, wherein said coupling end has a planar cross-section smaller than a corresponding planar cross-section of the other opposite end.
21. The paint roller as claimed in Claim 20, wherein said coupling portion is disposed centrally relative to said planar cross-section of said coupling end.
22. The paint roller as claimed in Claim 12, and further comprising at least one abutment member mountable to one of said opposite ends.

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